

ZX80/81, TS DAY AREA 10

155UE! Program reviews, Machine Code, FONE file PART ONE THIS

MEMBERSHIP PROPOSALS

THE FOLLOWING PROPOSALS WEE VOTED ON MAY 19. THEY ARE BEING MADE TO TAKE CARE OF INCREASED PRODUCTION AND MAIL COSTS AND TO ALLOW MEMBERS TO USE OUR EXPANDING PROGRAM LIBRARY. MAILING RS TO

MEMBERSHIP DUESFULL (NEWSLETTER AND LIBRARY PRIVILEGES) \$15.00
NEWSLETTER ONLY \$10.00
STUDENT \$8.00
MONTHLY (GUARANTEES TWO
NEWSLETTERS) \$2.00

ALL RATES ARE FOR ONE YEAR.
HALF YEAR RATES ARE:
FULL (1/2 YEAR) \$ 8.50
NEWSLETTER (1/2 YR) \$ 5.00
STUDENT (1/2 YR) \$ 4.00 8.50 5.00 4.00

STUDENT MEMBERS INCLUDE UP TO HIGHSCHOOL AGE INDIVIDUALS. FULL AND STUDENT MEMBERS WILL RECEIVE A LIBRARY CARD ALLOWING THEM TO CHECK OUT ONE TAPE OR BOOK FOR A PERIOD OF ONE MONTH*. *SEE ARTICLE BELOW.

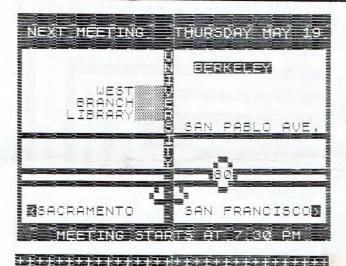
BOOK REVIEW *********

MASTERING YOUR TIMEX SINCLAIR
PERSONAL COMPUTER, BY TIM
HARTNELL AND DILWYN JONES

GET THIS BOOK**ESPECIALLY IF
YOU ARE A BEGINNER. IT TELLS
YOU ALL SORTS OF THINGS THE
MANUAL DOESN'T SUCH AS HOD
HOW TO USE COMMON PEEKS AND
HOW TO USE COMMON PEEKS AND
POKES, ALL ILLUSTRATED WITH
INTERESTING PROGRAMS. IT ALSO
INCLUDES A SECTION ON TRANSLATING FROM OTHER BASICS. AND ANY
BOOK WITH A SECTION ENTITLED
"GREAT SYSTEM CRASHES" HAS
SOMETHING GOING FOR IT.
THIS BOOK IS AVAILABLE FROM
BANTAM BOOKS FOR A LIST PRICE
OF \$3.95 (\$3.55 FROM CROWN
BOOKS).
HENRY POLLARD

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HENRY POLLARD



8 A Z U G LIBRARY

THE BAZUG LIBRARY IS AVAILABLE FOR MEMBERS WITH FULL OR STUDENT STATUS. ITEMS MAY BE CHECKED OUT FOR USE DURING MEETINGS BEFORE 9:00 P.M. AFTER WHICH MEMBERS MAY TAKE TURNS SELECTING ITEMS TO CHECK OUT FOR HOME USE. ALL MATERIALS ARE DUE BACK THE NEXT MONTHLY MEETING WITH THE PROVISION THAT IF ANOTHER MEMBER WISHES TO BORROW THE SAME ITEM, ARRANGEMENTS HAVE TO BE MADE SO BOTH MEMBERS HAVE EQUAL ACCESS TO THE MATERIAL.

Well, here it is! Yes

You too can have lower case
letters IF you have a printer
and IF you have alot of
patience. That's right! this
has been done without any
hardware modification. The
machine code program that
allows your PRINTER to do this
is rather slow entering a 32
character line at a time for
translating to upper and lower
case - taking about 13 seconds
to change. The benefits
include user defined graphics
such as these: !@#↑%% 'П@

DETAILS AND PROGRAM available at the May 19 meeting.
SEE YOU THERE!!!

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RICHMOND, CA

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lim March 3216 Partridge Ave. Oakland, Ca. 94605

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GRAPHICS ++ DOCUMENTATION	<u> </u>				
PRESENTATION CONCEPT TYPE					
PROGRAM AND COMPANY					
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MELBOURNE HOUSE	ARCADE GAME OK GRPHC A+				
AIR ATTACK BY	16K 3 9 9 8 R 0 GAME 5 1 1 5 1 8				
INTERCOMP					
BACKGAMMON BY Timey	16K B B B B R 0 GAME 5 7 6 9 1 5				
TIMEX (SINCLAIR)	TOO SLOW				
CHESS BY PSION	16K . B B 0 B R 0 GAME 8 7 7 7 2 8				
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DICTATOR	VU-FILE BETTER				
BY BUG-BYTE	GAME 888728 ADVEN				
ELUSIVE MR BIG	ROB COUN AND RUN 16K B B B B R O GAME 5 4 1 5				
MR BIG BY SOFTSYNC	GAME 5 4 1 5 ADVEN ALL WORDS				
FLIGHT SIMULATOR	16K 2 2 2 2 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				
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GUARD THE PRESIDENT	16K 3 2 3 6 R 0 GAME 3 7 - 1 3				
BY INTERCOMP	POOR(? ED)				
MARS BY	16K B D B B R 0				
AARDVARK	ADVEN ALL URDS,20+ HRS				
MAZOGS BY SOFTSYNC	16K B B B B R O GAME 7 9 9 9 2 B ARCADE				
	ARCADE GOOD MC GAME				
PRESIDENTIAL CAMPAIGN BY	16K 2 2 3 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
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BY AARDVARK	15K BBBBBR0 GAME 978838 ADVEN CHALLENGING				
QUEST FOR	15K B B B B R O				
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RED ALERT BY	16K 3 2 3 3 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
SÖFTSYNC	ARCADE				
ROBBERS OF The Lost Tomb by	16K B D B C R O				
TOMB BY Timeworks	ADVEN POOR GRPHC,LONG				

OVERALL RAT NO. OF REPL GRAPHICS FA	ING :: IES ::: !!!!!!	7	* * *	2 2 2	
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PRESIDENT J.	IM MAR(RUCE BU ICK LI)	CH JCHAI	NAN		

TREASURED BRUCE BUCCHNAM
EDITOR RICK LINK
STAFF JOEL BRODY, WOODY
MCPHEETERS, H. POLLARD
PLEASE SEND ALL ARTICLES,
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CREDIT IS GIVEN TO THE SOUR
PROPER SOURCE.

MACHINE CODE UTILITY PROGRAMS: ASSEMBLERS

It'a cliche that Z80 machine code (MC) is just another programing language that you shouldn't be scared of or put off by. However, MC programing on a T/S can be frustrating and tedious without the aid of utility programs. Without these aids the MC routine involves 1) making a program flowchart, 2) writing out the program in Z80 mnemonics, 3)translating the mnemonics into the number code and 4) POKEing in the code usually with the help of a simple BASIC loading program. If there are errors, deletions or additions you have to repeat steps 3 & 4 which can make the process quite discouraging.

Much of the hassle of MC can be eliminated with a good "assembler program". Assemblers do the dirty work of translating mnemonics and entering the code, so you are left with the programing problems alone. Recently, I obtained 2 assemblers at Sunset Electronics:

ZX Assembler, IPS (written by Artic), \$14.95 ZXAS, Data-assette (written by Bug-Byte) \$14.95

ZX Assembler is a wonderful program that is an absolute must for anyone doing MC on a T/S. Briefly, here is what the program does:

1)You can type in the Z80 mnemonics and the program will assemble the MC in a REM state- $\,$ ment. This feature alone makes the program worthwhile. Numbers can be included in decimal or hex.

2)You can insert and delete lines and digits easily. You can do this with word processor ease and there is a repeat function for all

3)ZX Assembler allows you to label statement lines. A label is placed before a line of mnemonics. You can then CALL or JP to the label name instead of going through the tedious process of determining the exact address of the line. This is very useful during editng and debugging where the address can change.

4) You can include comments after the mnemonic

code to explain a line or routine.

5) There is a facility to move blocks of memory from one location to another.

6)There is a monitor routine that will list memory locations and their contents.
7)You can directly inspect and modify the

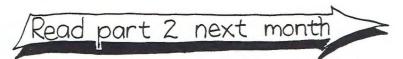
Z80 registers.

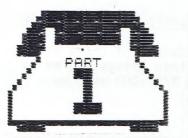
8)The program has a number of useful MC subroutines that are useful in your programs.

This is quite a lot for a program to do. It eliminates the unnecessary frustration and tedium of MC and leaves you only the unavoidable frustration. The documentation of ZX Assembler is excellent. It is the most professional and trouble free T/S program I have seen. You need this program if you are serious about MC.

ZXAS is not as good as ZX Assembler. The mnemonics are entered in modified form in a series of REM statements. This is difficult to get used to as compared to <u>ZX Assembler</u> where the program you enter is in the form you see in SYNC. The editing facilities are poor and the documentation is sparse and cryptic. ZXASwould be very useful if it was all that was available, but this is not the case.

Joel Brody





"FONE" FÎLÊ PROG

THÍS PROGRÁM HAS BEEN DONATED BY GERALD PAXTON FOR YOUR USE (SO ******

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SET-UP ROUTINE ENTER THESE COMMANDS-NO LINE NO.

SPACE STACE RUN 2 LET B\$="14 MAX" LET A=50 95 GOTO 30

1 GOTO 50 10 REM COPYRIGHT 1983 GERALD P AXTON 20 DIM B\$(14) 30 DIM N\$(A,32) 40 LET B=0 50 LET E\$="

50 LE | E\$ = "...

50 CLS | TELEPHONE LIST | MBUME | NAME GOTO 11
HEN GOTO 1
THEN GOTO 1
THEN GOTO 9
THEN GOTO 9
THEN GOTO 9
THEN GOTO 1

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Joel Brody

Kead part 2 next month



"FONE" FILE PROS.

THIS PROGRAM
HAS BEEN DONATED
FOR GERALD PACTON
FOR GERALD PACTON
FOR AS YOU DON'T
SELL IT). PACTET
HONTH. PAPER TO HAD
HONTH. PAPER TO HAD
HONTH. ENTER
HONTH. ENTER
HOUT LINE NO BERAL.
EACH COMBERANCE
HAS LISTED TO LIKE
A CASSETTE COPYOUR
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MEETING WITH A
BLANK CASSETTE AND
\$1.00 TO BE DONATED
TO BAZUG.
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N DIM B\$(14) DIM N\$(A,32) LET B=0 LET E\$="...

0 160 IF INKEY\$="F" THEN GOTO 129

Ø GOTO 100 CLS LET X=0 LET X=X+1 LET J=J+1 PRINT N\$(X) IF J=20 THEN GOSUB 290 IF X(B THEN GOTO 210 PRINT "LAST ITEM ON LIST" GOSUB 290 N\$(X)
J=20 THEN GOSUB 290

1F X<B THEN GOTO 210

260 PRINT "LAST ITEM ON LIST"
270 GOSUB 290
280 GOTO 80
290 PRINT "KEY ""ENTER"" TO CON
TINUE"
310 INPUT Z\$
320 CLS
330 RETURN
340 CLS
350 LET B=B+1
360 LET S=1
370 IF B>A OR
380 IF N\$(X)
390 LET
400 GOT